

Work Order ID 102850

\*102850\*

Page 1

June-12-13 9:15:21 AM

Item ID: 646.3910

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Shim

Start Date: 6/11/13 Start Qty: 10.00

\*10\*

Cust Item ID:

Required Date: 6/11/13 Req'd Qty: 10.00

\*10\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
646.3900	N/C

110

\*110\*

Waterjet

FLOW CNC Waterjet

ML10955.020

Blue Spring  
Steel

Memo

1-Cut as per Dwg  
Dwg Rev: N/C  
Prog Rev: N/C

2-Deburr if necessary

120

QC2- Inspect parts off machine FAI/FAIB

0.00

\*120\*

QC

Quality Control

Memo

0.00

12 0 Jm 308-14

12 0 Jm 308-14

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____			<b>DISPOSITION</b>			<b>AGAINST DEPARTMENT/PROCESS</b>															
Part No. _____ NCR No. _____			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>
Root Cause	Date	Step	Qty	Description of work order update or non-conformance			Initial Chief Eng	Action Description			Sign & Date	Verification		QC Inspector							
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved																					
FAULT CATEGORY																					
Landing Gear	General			Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence			Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge			Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other											
	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube			Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function																	

**Work Order ID 102850****\*102850\***

June-12-13 9:15:21 AM

Page 2

Item ID: 646.3910

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Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Shim

Start Date: 6/11/13

Start Qty: 10.00

**\*10\***

Cust Item ID:

Required Date: 6/11/13

Req'd Qty: 10.00

**\*10\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 <b>*130*</b> QC	QC8- Inspect parts - second check Memo	0.00	ShB				10		
Quality Control		0.00	13 & 14						
140 <b>*140*</b> Outsource3	Outsource process-Cadplate per QSI017 4.1.9.1 Memo	0.00							
Outsource process - Cad plate	Issue P/O: 20975	0.00							
150 <b>*150*</b> Packaging	Receive & Inspect for Damage & Mat'l Certs Memo	0.00							
Packaging		0.00							

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_

Date: \_\_\_\_\_

Work Order update only 

Work Order: _____				<b>DISPOSITION</b>		<b>AGAINST DEPARTMENT/PROCESS</b>						
				Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
				Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
				Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
				Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector	
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved												
<b>FAULT CATEGORY</b>												
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function			<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence				<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge			<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

Work Order ID 102850

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Page 3

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Date: \_\_\_\_\_

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Date: \_\_\_\_\_

Run Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

160

QC5- Inspect part completeness to step on W/O

\*160\*

QC

Quality Control

Set Up/  
Run Hours

0.00

0.00

DAS  
27  
B 9/8/B

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

10

170

Identify as per dwg & Stock Location: STS35 0.00

\*170\*

Packaging

Packaging

Memo

0.00

\*\*\*IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND  
REV\*\*\*

12x \_\_\_\_\_ Sp B-9-B

180

QC21- Final Inspection - Work Order Release 0.00

\*180\*

QC

Quality Control

Memo

0.00

13/9/16 JJ

J Boag B

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Date:



# **WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## Work Order update only

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework Scrap Use-as-is Suspected Unapproved	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design											
Doc/Data											
Equip/Tooling											
Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											
FAULT CATEGORY											
Landing Gear			General								
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced							
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up							
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure							
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld							
Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled							
Crushing	Countersink	Misaligned/off center	Positioned Wrong								
Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge								
Inspection Strip in Tube	Drawing	Misread									
Marks/Chatter	Drill Holes	Off-set									
Turning Sequence	Finish	Out of Calibration									
Wave/Twist in Tube	Fit/Function	Out of Sequence									

# Picklist Print

Page 1

June-12-13 9:15:21 AM

Work Order ID: 102850

Start Date: 6/11/13

Required Date: 6/11/13

Parent Item: 646.3910

Start Qty: 10.00

Required Qty: 10.00

Parent Item Name: Shim

Comments: IPP REV:A 12.12.23 NEW ISSUE DD VERF:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MC1095S.020 C1095 Blue Tempered Spring Steel Sheet .020		Purchased	No			110	sf	6.9000	0.03	0.315789 0.5		Jm 1308-14	

Location	Loc Qty	Loc Code
MAT022	6.9	
123537	6.9	

126423

126423

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	<b>DISPOSITION</b> <input type="checkbox"/> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved	<b>AGAINST DEPARTMENT/PROCESS</b> <input type="checkbox"/> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

<b>FAULT CATEGORY</b>									
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other					

DART AEROSPACE LTD	Work Order:	107850
Description: Shim	Part Number:	646.3910
Inspection Dwg: 646.3900 Rev: N/C		Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

Measured by:	Jm	Audited by:	ShS	Preliminary Approval:	
Date:	13-08-14	Date:	13-8-14	Date:	

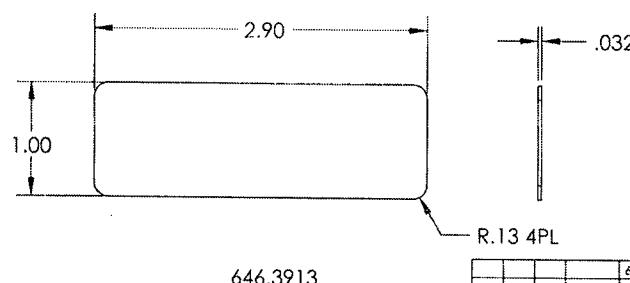
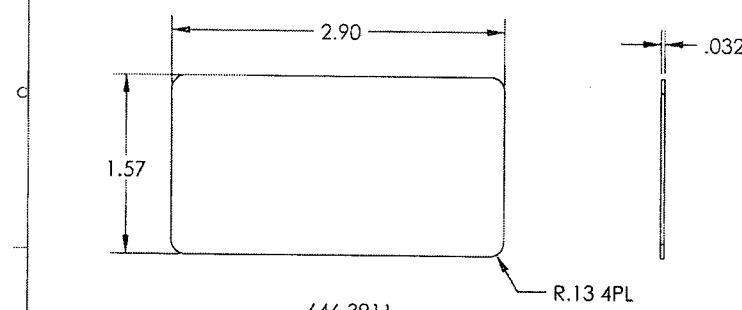
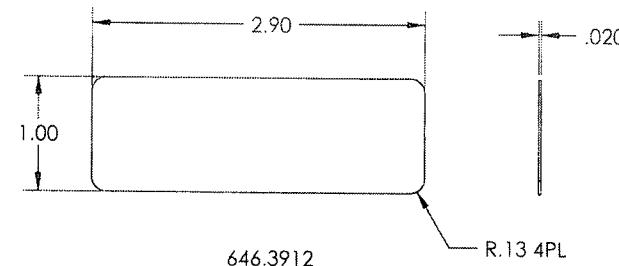
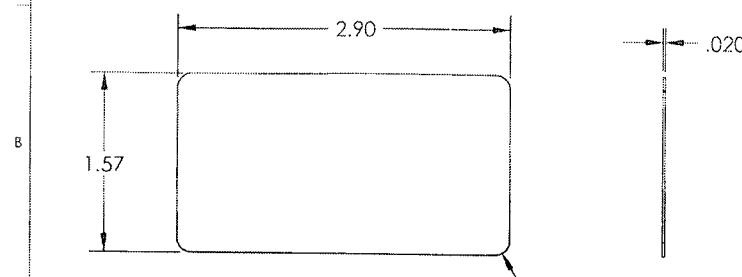
Rev	Date	Change	Revised by	Approved
A	12.11.30	New Issue	KJ	AA

NCTFS:

1 MATERIAL: SHIM STOCK, C1095 BLUE-TEMPERED SPRING STEEL

2 FINISH: CAD PLATE PER QQ-P-416 TYP II CL2

3. IDENTIFY IAW MPP-120



		646.3913	SHIM	△	△
		646.3912	SHIM	△	△
		646.3911	SHIM	△	△
		646.3910	SHIM	△	△
	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY			PARTS LIST		

NEXT ASSY (S) 646.4000 APICAL INDUSTRIES  
INSTRMNTN P/N 2608 TEMPLE HEIGHTS DR.  
S REF: P/MARVO OCEANSIDE, CA 92056-3512 (760)724-5300  
DRAWINGS APPROVAL BY: 89  
CONTRACT #: 09-33-08  
DATE: 09-15-08  
UNLESS OTHERWISE SPECIFIED  
TOLERANCES ARE IN INCHES  
TOLERANCES ARE  
NOT TO EXCEED 1/16 INCHES  
2 PLACE DECIMALS 2D3  
ANGLES ± 3°  
SPEC. CAGE CODE: QNG. NO: 646.3900  
B 07M16  
SCALE: NONE  
1 OF 1 SHEET

UNCONTR. ED. CO., INC.  
SUBTITLE A AND B  
WITH L1000-3  
W/C 03/08  
102850 MLJ  
13-06-12

**CERTIFICATE OF  
CONFORMANCE**

**CADORATH PLATING CO. LTD.  
2150 LOGAN AVENUE  
WINNIPEG, MANITOBA R2J-0J1**

**DATE:** Sep-10-2013

**CONSIGNMENT TO:** Dart Aerospace Ltd.  
1270 Aberdeen St.  
Hawksbury, ON K6A 1K7

**W/O #:** 127630  
**INVOICE #:** 67490

**CONTRACT OR  
PURCHASE ORDER #**

PO20975

**DESCRIPTION:** SHIM

**QTY**

12

**P/N #** 646.3910

**S/N #** 102850

CADMIUM PLATING IAW AMS-QQ-P-416C TYPE 2 YELLOW CLASS 2.  
BAKE HEAT CHART # 13-787.

**CERTIFICATE:** I certify that the items indicated here on have  
been inspected and tested and conform to all specifications  
and requirements detailed on the contract or purchase order.

CI  
22

**Approved Inspector:** \_\_\_\_\_